IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Devon L. Strawn, et al.

Application No.: **10/825,035**

Filing Date: **July 31, 2006**

For: **BLENDED OBJECT ATTRIBUTE KEYFRAMING MODEL**

Confirmation No.: **7412**

Group Art Unit: **2628**

Examiner: **Said A. Broome**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REPLY PURSUANT TO 37 CFR § 1.111

In response to the Official Action dated **July 31, 2006**, reconsideration is respectfully requested in view of the amendments and/or remarks as indicated below:

☐   **Amendments to the Specification** begin on page   of this paper.

☒   **Amendments to the Claims** are reflected in the listing of the claims which begins on page 2 of this paper.

☐   **Amendments to the Drawings** begin on page   of this paper and include an attached replacement sheet.

☒   **Remarks** begin on page 8 of this paper.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.   (Currently Amended) A method of keyframing an object <u>implemented at least in part by a computer</u>, comprising:

        identifying at least one property and a time for the object;

        creating a first compound key frame at the time;

        receiving a second time for the object; ~~and~~

        creating a second compound key frame at the second time<u>; and</u>

        <u>receiving a change to the at least one property prior to creating the second compound key frame, the second compound key frame incorporating the change to the at least one property</u>.

2. (Original) The method of claim 1, further comprising receiving additional times for the object and creating associated compound key frames at each of the additional times.

3.   (Original) The method of claim 1, wherein receiving the second time for the object comprises moving a playhead to a position on a timeline in a user interface, the position corresponding to the second time.

4.   (Original) The method of claim 1, further comprising entering an animate mode prior to creating the first compound key frame.

5.   (Original) The method of claim 1, wherein each of the first and second compound key frames represents the state of the at least one property on the object at the associated time.

6.   (Cancelled)

7.   (Currently Amended) The method of claim ~~6~~1, further comprising creating an attribute key frame responsive to the received change to the at least one property if no attribute key frame exists for the at least one property at the time the received change is received, and changing an existing attribute key frame responsive to the received change to the at least one property if the existing attribute key frame exists at the time the received change is received.

8. (Original) A method of keyframing an object, comprising:

receiving a value for an attribute for the object at a first time;

if an attribute key frame corresponding to the attribute exists at the first time, then amending the attribute key frame responsive to the received value for the attribute;

otherwise, populating a neighboring object key frame with an attribute key frame if an object key frame exists.

9.   (Original) The method of claim 8, wherein populating the neighboring object key frame comprises:

if the neighboring object key frame exists later in time than the first time, and an attribute key frame exists later in time than the first time, then setting a first value to the value of the attribute key frame that exists later in time than the first time;

if the neighboring object key frame that exists later in time than the first time, and an attribute key frame does not exist later in time than the first time, then setting the first value to the value of the originally received value for the attribute; and

creating a new attribute key frame at the neighboring object key frame using the first value.

10. (Original) The method of claim 9, further comprising:

if the object key that exists is earlier in time than the first time, and an attribute key frame exists earlier in time than the first time, then setting a second value to the value of the attribute key frame that exists earlier in time than the first time;

if the object key that exists is earlier in time than the first time, and an attribute key frame does not exist earlier in time than the first time, then setting the second value to the value of the originally received value for the attribute; and

creating a new attribute key frame at the neighboring object key frame using the second value.

11.   (Original) The method of claim 8, wherein populating the neighboring object key frame comprises:

if the object key that exists is earlier in time than the first time, and an attribute key frame exists earlier in time than the first time, then setting a first value to the value of the attribute key frame that exists earlier in time than the first time;

if the object key that exists is earlier in time than the first time, and an attribute key frame does not exist earlier in time than the first time, then setting the first value to the value of the originally received value for the attribute; and

creating a new attribute key frame at the neighboring object key frame using the first value.

12.   (Currently Amended) In a computer system having a graphical user interface including a display and a user interface selection device, a method of keyframing an object via a timeline element on the display, comprising:

receiving a selection signal indicative of the user interface selection device selecting at least one property and a time for the object;

displaying a first compound key frame at the time on the timeline element;

receiving a selection signal indicative of the user interface selection device selecting a second time for the object; ~~and~~

displaying a second compound key frame at the second time on the timeline element; and

receiving a selection signal indicative of the user interface selection device selecting a change to the at least one property prior to displaying the second compound key frame, the second compound key frame incorporating the change to the at least one property.

13.   (Original) The method of claim 12, further comprising receiving additional selection signals indicative of the user interface selection device selecting additional times for the object, and displaying associated compound key frames at each of the additional times on the timeline element.

14.   (Original) The method of claim 12, wherein receiving the selection signal indicative of the user interface selection device selecting a second time for the object comprises receiving an execution signal indicative of a user moving a playhead to a position on a timeline in the timeline element, the position corresponding to the second time.

15.   (Original) The method of claim 12, further comprising receiving an execution signal indicative of a user selecting an animate mode prior to displaying the first compound key frame.

16.   (Cancelled)

17.   (Currently Amended) The method of claim ~~16~~ 12, further comprising displaying an attribute key frame responsive to the received change to the at least one property on the timeline element if no attribute key frame exists for the at least one property at the time the

received change is received, and changing an existing displayed attribute key frame responsive to the received change to the at least one property if the existing displayed attribute key frame exists at the time the received change is received.

18.   (Original) A display device having rendered thereon a timeline element for keyframing an object by receiving a selection signal indicative of a selection of at least one property and a time for the object; displaying a first compound key frame at the time on the timeline element; receiving a selection signal indicative a selection of a second time for the object; and displaying a second compound key frame at the second time on the timeline element.

19.   (Original) The display device of claim 18, wherein the timeline element is adapted to receive additional selection signals indicative of a selection of additional times for the object, and display associated compound key frames at each of the additional times on the timeline element.

20.   (Original) The display device of claim 18, wherein the timeline element comprises a movable playhead.

21.   (Original) The display device of claim 18, wherein the timeline element is adapted to receive an execution signal indicative of a user selecting an animate mode.

22.   (Original) The display device of claim 18, wherein the timeline element is adapted to receive a selection signal indicative of a selection of a change to the at least one property prior to displaying the second compound key frame, the second compound key frame incorporating the change to the at least one property.

23.   (Original) The display device of claim 22, wherein the timeline element is further
adapted to display an attribute key frame responsive to the received change to the at least one
property on the timeline element if no attribute key frame exists for the at least one property
at the time the received change is received, and to change an existing displayed attribute key
frame responsive to the received change to the at least one property if the existing displayed
attribute key frame exists at the time the received change is received.

24-31. (Cancelled)

REMARKS

Claims 1-31 are pending in the present application. Claims 19-24 stand rejected under 35 U.S.C. § 112, ¶ 2. Claims 1-12 and 19-24 stand rejected under 35 U.S.C. § 35 U.S.C. § 101. Claims 1-8, 13-25, 30 and 31 stand rejected under 35 U.S.C. § 102(b) as being anticipated by "Full Product Review Adobe LiveMotion" (Skyrme). Claims 9-12 and 26-29 stand rejected under 35 U.S.C. § 103(a) in view of Skyrme. Claims 1, 7, 12 and 17 have been amended. Claims 6, 16, and 24-31 have been cancelled. No new matter has been added.

35 U.S.C. § 112, ¶ 2 Rejections

Claims 19-24 have been rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner states that it is unclear what is meant by the "the display device." Applicants respectfully disagree that the claim language is indefinite, and the display device comprises a device capable of rendering the timeline element. Applicants respectfully request that the Examiner withdraw the rejection and allow claims 19-24.

35 U.S.C. § 101 Rejections

Claims 1-12 and 19-24 have been rejected under 35 U.S.C. § 101 because the claims invention is allegedly directed to non-statutory subject matter. With respect to claims 1-12, Applicants respectfully disagree, but have amended claim 1 to overcome the rejections. With respect to claims 19-24, Applicants respectfully disagree that that the display device of claims 19-24 is not a machine as described under 35 U.S.C. 101. A display is clearly a machine. Accordingly, Applicants request that the Examiner withdraw the rejections and allow claims 1-12 and 19-24.

35 U.S.C. § 102 Rejections

The Examiner has rejected claims 1-8, 13-25, 30 and 31 under 35 U.S.C. § 102(b). Applicants respectfully submit that the claims as amended contain features not taught or suggested by the cited prior art. Independent claim 1 has been amended to incorporate the features of now cancelled claim 6. Namely, **receiving a change to the at least one property**

prior to creating the second compound key frame, the second compound key frame incorporating the change to the at least one property. In the rejection to claim 6, the Examiner stated that Skyrme taught such a feature in section 2, page 2 third paragraph. Applicants respectfully disagree. The cited portion explicitly describes creating a second key frame prior to receiving a change to a property. This is completely different than receiving the property then creating a second compound key frame as taught by claim 1 as amended. Applicants respectfully request that the Examiner withdraw the rejection and allow claim 1.

Claims 2-5 and 7 are all dependent on independent claim 1, and are therefore allowable for at least the reasons given above for independent claim 1. Applicants respectfully request that the Examiner withdraw the rejection and allow claims 2-5 and 7.

Independent claim 8 includes features not taught or suggested by the prior art of record. Specifically, claim 8 teaches **amending the attribute key frame responsive to the received value for the attribute.** The Examiner stated that **amending the attribute key frame responsive to the received value for the attribute** is taught by Skyrme at section 1, page 1, sixth paragraph lines 3-7. Applicants respectfully disagree. First, the cited portion makes no mention of an attribute key frame. Furthermore, there is similarly no discussion of amending an attribute key frame, but rather a description of how the object transform drop down menu is opened. Applicants respectfully submit that this is not the same as **amending the attribute key frame responsive to the received value for the attribute.** Accordingly, Applicants respectfully request that the Examiner withdraw the rejection and allow claim 8.

Claims 9-11 are all dependent on claim 8, and are therefore allowable for at least the reasons given for independent claim 8 above. Applicants therefore respectfully request that the Examiner withdraw the rejections and allow claims 9-11.

Independent claim 12 as amended includes features neither taught or suggested by the prior art of record. In particular, independent claim 12 includes the feature of **receiving a selection signal indicative of the user interface selection device selecting a change to the at least one property prior to displaying the second compound key frame, the second compound key frame incorporating the change to the at least one property.** This feature is similar to the feature argued above with respect to independent claim 1, and is similarly not present in the Skyrme reference. Skyrme explicitly teaches displaying the compound key frame prior to receiving a selection signal indicative of a change to a property. This is

completely the opposite of what is described in claim 12. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection and allow claim 12.

Claims 13-15 and 17 are all dependent on claim 12, and are therefore allowable for at least the reasons given for independent claim 12 above. Applicants therefore respectfully request that the Examiner withdraw the rejections and allow claims 13-15 and 17.

Independent claim 18 includes features neither taught or suggested by the prior art of record. Specifically, claim 18 includes the feature of **receiving a selection signal indicative a selection of a second time for the object, and displaying a second compound key frame at the second time on the timeline element**. The Examiner stated that Skyrme teaches such a feature at section 1, page 1, sixth paragraph lines 3-7. Applicants respectfully disagree. The cited portion describes how an image can be dragged around, and if the object transform drop down menu is opened, tweens are automatically inserted between key frames. There is simply no description of **receiving a selection signal indicative of a selection of a second time for the object and displaying a second compound key frame at the second time on the timeline element**, as required by claim 18. Applicants respectfully request that the Examiner withdraw the rejection and allow claim 18.

Claims 19-23 are all dependent on claim 18, and are therefore allowable for at least the reasons given for independent claim 18 above. Applicants therefore respectfully request that the Examiner withdraw the rejections and allow claims 19-23.

Date: October 31, 2006   /Michael W. Tieff/
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